Bids received until Feb. 1, 1915.

Almshouse Building

Bridgeport, Conn.

Sealed proposals will be received by the undersigned until 12:00 o'clock noon, Monday, Feb. 1st, 1915, for the erection of Almshouse Building for the City of Bridgeport, Conn. Separate bids will be received on the following: Item No. 1, General Construction of building, including the electrical work, Item No. 2, Mechanical Equipment.

Each bid must be accompanied by a certified check for 2½% of the amount of the bid. All checks to be made payable to the City of Bridgeport. Checks will be returned to unsuccessful bidders as soon as possible after awarding the contracts. The successful contractors will be required to give satisfactory bond guaranteeing the faithful performance of each contract aggregating in amount to 50% of the amount of the contract.

The Board of Charities reserves the right to reject any or all bids.

One set of drawings and specifications may be obtained upon application to the undersigned upon payment of $25.00. This deposit to be forfeited if drawings and specifications are not returned in good order at the expiration of ten days from date of receiving same.

BOARD OF CONTRACT & SUPPLY,
Room No. 28, City Hall, Bridgeport, Conn.

⌘

Bids received until Jan. 20, 1915.

Fire Hydrants, etc.

Sweetwater, Texas.

The City of Sweetwater, Texas, will consider proposals at 2 P.M. of January 20, 1915, for the purchase of the following materials:

50 fire hydrants, 6" inlet, one 4" outlet, two 2½" outlets, six foot barrel, automatic drain and working pressure of 125 lb. per sq. inch.

60 iron body, hub ends, gate valves in sizes ranging from 4" to 12" with working pressure of 125 lb. per sq. inch.

½ dozen blowoff valves for 12" line with working pressure of 60 lb. per sq. inch.

½ dozen automatic air escapes for same line.

1500 18" extension service boxes.

1500 water meters.

1500 Mueller corporation cocks in sizes from ½" to 1".

1500 wiped joint 18" goosenecks connections from ½" to 1".

Above are approximate quantities required and the City reserves the right to purchase more or less as desired, or to reject all proposals.

Dealers in these materials are invited to submit data and prices on or before the above mentioned date.

GEO. T. WILSON, Mayor.

⌘

Bids received until Jan. 21, 1915.

Motor for Laundry

Poughkeepsie, N. Y.

Sealed proposals for Motor for Laundry at the Hudson River State Hospital, Poughkeepsie, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 2:30 P.M., Jan. 21, 1915, when they will be publicly opened and read. Proposals shall be enclosed in envelopes furnished by the State Architect, sealed and endorsed, and shall be accompanied by a certified check in the sum of One hundred fifty Dollars. The contractor to whom the award is made will be required to furnish a surety company bond in the sum of 50% of the amount of contract within thirty days after official notice of award of contract, and in accordance with the terms of specification No. 2144. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Hudson River State Hospital, Poughkeepsie, N. Y., at the New York office of the Department of Architecture, Room No. 1224, Woolworth Building; at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposals may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Lewis F. Pilcher.

LEWIS M. FARRINGTON,
Assistant Secretary.

Dated, Albany, N. Y., December 30, 1914.

Bids received until Jan. 14, 1915.

Superstructures of Highway Bridges

THE SANITARY DISTRICT OF CHICAGO
TO CONTRACTORS

Sealed proposals indorsed "PROPOSALS FOR SUPERSTRUCTURES OF HIGHWAY BRIDGES ACROSS THE CALUMET-SAG CHANNEL" will be received by the Clerk of The Sanitary District of Chicago at the office of said District, Room 700, No. 910 South Michigan Avenue, Chicago, Illinois, until 12 M., standard time on Thursday, JANUARY 14, 1915, and will be publicly opened by the Board of Trustees of said Sanitary District at a meeting to be held on that day or at the first meeting thereafter.

The work for which such tenders are invited consists of the furnishing, fabrication and delivery of all metal work for the superstructures of the following bridges:

DIVISION A: A STEEL HIGHWAY BRIDGE across the Calumet-Sag Channel of The Sanitary District of Chicago on the line of WEST EIGHTY-SECOND STREET, situated in the Township of Palos, County of Cook, State of Illinois, and DIVISION B: A STEEL HIGHWAY BRIDGE across the Calumet Sag Channel of The Sanitary District of Chicago on the line of BURR OAK AVENUE, situated in the Township of Worth, County of Cook, State of Illinois.

Proposals may be submitted for the work under either of said Divisions or for the work under both of said Divisions.

A deposit of THREE HUNDRED DOLLARS ($300.00) is required with each proposal for the work under Division A, and of SEVEN HUNDRED DOLLARS ($700.00) with each proposal for the work under Division B, or a total of ONE THOUSAND DOLLARS ($1,000.00) with each proposal for the work under both of said Divisions.

The work under EACH of said Divisions may be awarded under a separate contract or the work under BOTH of said Divisions may be awarded under one contract, as the Sanitary District may elect.

All proposals must be made upon blank forms of proposal furnished by said Sanitary District, and shall be made in accordance with and to conform to all the terms and conditions set forth in "Requirements for Bidding and Instructions to Bidders" attached thereto.

Form of proposal, contract, specifications, and plans may be obtained upon application at the office of said Sanitary District. A deposit of Five Dollars ($5.00) will be required for each set of plans and specifications taken out. Said sum of Five Dollars ($5.00) so deposited, will be refunded by said Sanitary District upon the return of said plans and specifications to said Sanitary District, in good condition, provided same are returned within thirty (30) days after the date on which said proposals are opened.

The Board of Trustees of said Sanitary District reserves the right to reject any or all proposals.

THE SANITARY DISTRICT OF CHICAGO,
By THOMAS A. SMYTH,
Attest: President of its Board of Trustees.
JOHN McGILLEN, Clerk.
Chicago, December 28, 1914.

⌘

Bids received until Jan. 21, 1915.

Underground Steam Connections

Collins, N. Y.

Sealed proposals for Underground Steam Connections, etc., for the existing buildings at the Gowanda State Homeopathic Hospital, Collins, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until January 21, 1915, at 2:30 p.m., when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and endorsed, and shall be accompanied by a certified check in the sum of Three hundred Dollars. The contractor to whom the award is made will be required to furnish a surety company bond in the sum of 50% of the amount of contract within thirty days after official notice of award of contract, and in accordance with the terms of specification No. 2188. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Gowanda State Homeopathic Hospital, Collins, N. Y., at the New York Office of the Department of Architecture, Room 1224, Woolworth Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank form proposals may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Lewis F. Pilcher.

LEWIS M. FARRINGTON,
Assistant Secretary.

Dated, Albany, N. Y., December 30, 1914.

Bids received until Jan. 20, 1915.

Gravity Conduit

Sweetwater, Texas.

The City of Sweetwater, Texas, will open bids at 2 P.M. on January 20, 1915, for the construction of a 12" diameter cast iron gravity conduit from Lake Trammell to Sweetwater, a distance of 6¾ miles. Engineer's estimate of cost is $16,000.00 not including pipe which has been purchased by the City.

Plans and specifications are on file in the office of the City Secretary. A deposit of $15.00 will be required to guarantee the return of same in good condition.

The City reserves the right to reject any or all bids.

W. H. BARTLETT, City Secretary.

Bids received until Jan. 20, 1915.

Stand Pipe

Sweetwater, Texas.

The City of Sweetwater will consider proposals at 2 P.M. of January 20, 1915, for furnishing and erecting a 250,000 gallon capacity cylindrical steel stand pipe, 28' in diameter and 60' high. Concrete base will be constructed by the City. Manufacturers are invited to submit plans, specifications and prices on or before the above date.

GEO. T. WILSON, Mayor.

U. S. ENGINEER OFFICE, Cincinnati, O., Dec. 26, 1914.—Sealed proposals for constructing Lock and Dam No. [illegible] Ohio River, near Maysville, Ky., will be received at this office until 2 p.m. (Central Time), January 26, 1915, and then publicly opened. Information on application. H. JERVEY, Lt.-Col., Engrs.

PROPOSALS FOR CONSTRUCTING CONCRETE STOREHOUSE, Office Const. Quartermaster, U. S. A., Fort Warren, Mass., December 18, 1914.—Sealed proposals in triplicate will be received at this office until 12 o'clock noon, January 18, 1915, and then opened for furnishing all labor and materials for the construction of a Concrete Storehouse at Fort Strong, Mass. Full information furnished upon application. Deposit, certified check, $5.00 required for plans. CAPT. H. T. MATTHEWS, Q.M.C., Const. Quartermaster.

U. S. ENGINEER OFFICE, CHICAGO, ILL., Dec. 19, 1914.—Sealed proposals for reconstructing with piles and timber, part of East Pier at Michigan City Harbor, Ind., will be received at this office until 10 A.M., Jan. 19, 1915, and then publicly opened. Information on application. W. V. JUDSON, Lt.-Col., Engineers.

U. S. ENGINEER OFFICE, Wheeling, W. Va., December 30, 1914.—Sealed proposals for furnishing and erecting steel lock gates for Dam No. 15, Ohio River, will be received at this office until 11 a.m. (Eastern time), January 30, 1915, and then publicly opened. Information on application. T. H. JACKSON, Major, Engrs.

U. S. ENGINEER OFFICE, First District, New York City, Room 710, Army Building, 39 Whitehall Street, New York, N. Y., December 22, 1914.—Sealed proposals for Dredging in Hudson River Channel, N. Y., will be received at this office until 12 M., January 22, 1915, and then publicly opened. Information on application. W. M. BLACK, Col. Engrs.

Classified Advertising

Positions Wanted, 3 cents a word, minimum charge 50 cents an insertion, payable in advance.

Positions Open, (Civil Service Examinations), **Employment Agencies** (Labor Bureaus), **Business Opportunities, Wanted** (Agents and Salesmen—Contract Work), **Miscellaneous** (Educational—Books), **For Sale,** 5 cents a word, minimum charge $1.00 an insertion.

Count four words for keyed address care of New York; five for Chicago. Abbrevinated words or symbols count as full words.

Copy should reach us not later than 10 A.M. Wednesday for that week's issue. Answers addressed to our care, Tenth Avenue at Thirty-sixth St., New York or 1144 Monadnock Block, Chicago will be forwarded (excepting circulars or similarliterature).

No information given by us regarding keyed advertiser's name or address. Original letters of recommendation or other papers of value should not be inclosed to unknown correspondents. Send copies.

Advertisements calling for bids, $3.60 an inch per insertion. N

POSITIONS WANTED

Mechanical and Electrical Engineers

MECHANICAL ENGINEER, 34, technical school and 12 years' broad experience, desires position, in or near New York preferred. P. W. 635, Eng. News.

GRADUATE MECHANICAL ENGINEER; 25; with 3 years' broad experience handling men and selling building specialty; references. P. W. 702, Eng. News, Chicago.

MECHANICAL ENGINEER, 20 years' experience financial, executive, selling and advertising work, open for engagement. P. W. 674, Eng. News.

MECHANICAL ENGINEER desires position with company doing work in Latin-America, railroad, mine or construction. Nine years' experience designing and superintendency. Speaks Spanish fluently. P. W. 675, Eng. News, Chicago.

Civil Engineers

CIVIL ENGINEER, twelve years' experience, desires position on civil, railroad or municipal work. P. W. 485, Eng. News, Chicago.

ENGINEER, 14 years' experience; surveys on railroad location and construction, irrigation, drainage, United States Geological, subdivisions, flood prevention and sewers. 1844 Millard Ave., Chicago.

CIVIL ENGINEER, age 34, graduate, 12 years' experience general survey and construction work on Eastern railroads, desires position. P. W. 658, Eng. News.

SOUTH AMERICAN CIVIL ENGINEER, trained, and with twelve years' practical experience in this country, wishes to become connected with a contracting or manufacturing firm desiring representation in Argentina or Chile. Have good business and family connections in Santiago and Valparaiso. P. W. 672, Eng. News, Chicago.

CIVIL ENGINEER, eight years' experience on heavy construction; city and street work. Graduate of leading technical school. P. W. 684, Eng. News.

CIVIL ENGINEER, 26, technical graduate, 5 years' experience in railroad maintenance and municipal engineering and construction. Good references. P. W. 686, Eng. News, Chicago.

CIVIL ENGINEER, 24, university graduate, with two years' varied building construction experience, will accept anything reasonable; efficient; well recommended. P. W. 690, Eng. News.

CIVIL ENGINEER; good technical education; six years' experience in field, drafting and design, timber, steel and concrete structures (specializing in reinforced concrete), tracks, yards and earthwork, on heavy railroad construction and Panama Canal. P. W. 689, Eng. News.

CIVIL ENGINEER; technical graduate with business experience; 11 years' engineering experience in general and coal mine surveying, railroad construction, structural detailing and special track design. Would make an able assistant to a consulting engineer. P. W. 691, Eng. News.

CIVIL ENGINEER, technical graduate, with seven years' experience in field and office, desires responsible position. P. W. 692, Eng. News.

Bridge and Structural

CHIEF DRAFTSMAN, charge 60 men, desires change; age 35; strong personal force; proved executive ability; 14 years' comprehensive experience. P. W. 520, Eng. News.

STRUCTURAL DRAFTSMAN; 6 years' experience checking and detailing shop drawings for buildings, bridges and industrial plants. P. W. 631, Eng. News.

STRUCTURAL ENGINEER; Quebec bridge experience; can design detail, check or take charge of work. P. W. 693, Eng. News.

CHIEF DRAFTSMAN, charge 25 men, desires position; fully abreast of modern methods; proven executive ability; 15 years' varied experience; East preferred. P. W. 662, Eng. News.

STRUCTURAL ENGINEER; technical graduate; good all around steel man; also thorough knowledge of reinforced concrete. P. W. 694, Eng. News.

STRUCTURAL STEEL DRAFTSMAN; thoroughly experienced in designing detailing and checking; excellent reference; wishes position in New York or vicinity. P. W. 695, Eng. News.

STRUCTURAL ENGINEER; designer, detailer and checker; five years' good experience; technical graduate. P. W. 696, Eng. News.

BRIDGE AND STRUCTURAL ENGINEER; responsible experience with large bridge company in Canada. P. W. 697, Eng. News.

GRADUATE ENGINEER; designer bridge and structural work, reinforced concrete, railway and transmission line structures; general contracting and building. Experience in office and field. Open for engagement. P. W. 683, Eng. News.

STRUCTURAL ENGINEER; age, 33; university C. E.; eight years' experience designing steel and reinforced concrete structures. P. W. 705, Eng. News.

ERECTING ENGINEER AND SUPERINTENDENT of erecting bridges and steel structures, age 27, married, experienced erector of all types of movable bridges, cantilever, etc. Experienced on heavy foundations, pins and abutments, now employed. P. W. 673, Eng. News, Chicago.

STRUCTURAL DRAFTSMAN, age 24, having some gasoline engine experience also speaks and writes modern Greek fluently. P. W. 676, Eng. News.

Surveyors

INSTRUMENTMAN, 6 years' experience on location and construction. Age 28; speak Spanish. P. W. 647, Eng. News, Chicago.

AS CONCRETE INSPECTOR or rodman wanted by young man, 27 years, six years' experience on construction work. Good references. P. W. 681, Eng. News.

Draftsmen

DRAFTSMAN, designer; steel, general construction, 15 years; experience in charge, immediately available, city. P. W. 669, Eng. News.

Superintendents, Etc.

SUPERINTENDENT of building construction of broad experience, available January 1. References. Anywhere. P. W. 646, Eng. News.

ENGINEER; six years on railroad construction, bridges, buildings, dams, as designer, detailer, resident engineer, superintendent; opening wanted where ability, energy and results will lead to permanent opening. P. W. 663, Eng. News, Chicago.

SUPERINTENDENT, ESTIMATOR, 15 years' experience, executive ability, desires responsible position; go anywhere. P. W. 700, Eng. News, Chicago.

AGE, 26; college graduate; 8 years' experience in field and office along mining and steel works construction lines; location immaterial; best references. P. W. 704, Eng. News.

ESTIMATOR TO GENERAL CONTRACTOR; reliable, industrious; graduate C. E.; over 10 years' experience buildings and general engineering, private and public work; good designer and draftsman; reinforced concrete and fireproofing specialist; excellent knowledge of quantities on masonry, carpentry and allied building trades; will be open for engagement Jan. 15. P. W. 701, Eng. News.

CONSULTING ENGINEER AND SALESMAN; 5 years' traveling experience, introducing and contracting for construction materials, among state, city and private architects, engineers and contractors throughout Eastern half of the United States; open for similar engagement Jan. 15. P. W. 706, Eng. News.

GENERAL FOREMAN, 15 years' experience, 10 years on building and repairing of dams and powerhouses, first class on plant layout derricks, orange peel and dragline bucket work; anywhere after Jan. 15. References. P. W. 678, Eng. News, Chicago.

CONSTRUCTION ENGINEER, available Feb. 1; 45, married, absolutely temperate; 15 years' experience on large work; excavation, railroad building, all kinds of concrete and building construction, mill-wrighting, handling and placing heavy machinery. Anywhere. Best of references. P. W. 677, Eng. News, Chicago.

ENGINEER or GENERAL FOREMAN; 4 years in Mexico on hydraulic dam and railroad construction; 3 years on canal and railroad location; at present employed, desires to locate in South America; speaks Spanish. P. W. 680, Eng. News.

ENGINEER with eight years' field experience on municipal work, irrigation, state highway and railroad location and construction, will be open for position the first of the year. P. W. 640, Eng. News.

MIDDLE AGED MAN, 15 years' practical experience, general contracting, desires responsible position as superintendent and estimator. P. W. 685, Eng. News.

POSITIONS OPEN

YOUNG MAN with good technical education and knowledge of stenography wanted in contractor's office. $50 month. Apply 38 Park Row, N. Y. Room, 1103.

A NO. 1 RADIAL BRICK and reinforced concrete stack designer and estimator. State experience and salary desired. P. 679, Eng News.

Civil-Service Opportunities

Competitive examinations for the civil-service positions named below will be held on or up to the dates given. For detailed information, write the United States Civil Service Commission, Washington, D. C., or other addresses specified.

JUNIOR ENGINEER—On March 6, 1915, examinations will be held in Illinois for Junior Engineer in State Highway Commission. Residence in Illinois not necessary. Starting salary $75 a month and necessary expenses. Minimum age, 21 years. Applications must be filed before Feb. 27, 1915. For details write State Civil Service Commission, Springfield, Illinois.

SANITARY ENGINEER (Male)—$2500; examination Feb. 2; for vacancy in the Public Health Service and positions as they occur requiring similar qualifications; write to the United States Civil Service Commission, Washington, D. C., for Circular No. 75 and Application Forms Nos. 304 and 2095.

STRUCTURAL STEEL DRAFTSMAN (Male)—$4 per day; examination Feb. 3-4; for vacancy at the U. S. Naval Station at Newport, R. I., and for positions requiring similar qualifications; write to the United States Civil Service Commission, Washington, D. C., for Circular No. 71 and Application Form No. 1312.

TOPOGRAPHIC AID, TEMPORARY (Male)—$40-$75 per month; examination Feb. 3; for temporary employment under the Geological Survey during the field season; write to the United States Civil Service Commission, Washington, D. C., for Circular No. 79 and Application Form No. 1312.

JUNIOR TOPOGRAPHER (Male)—$720-$1200; examination Feb. 4-5; for vacancy in the Geological Survey; write to the United States Civil Service Commission, Washington, D. C., for Circular No. 78 and Application Form No. 1312.

CIVIL ENGINEER STUDENT (Male)—$720; examination Feb. 3; for vacancy in the Office of Public Roads, Department of Agriculture or other positions requiring similar qualifications; write to the United States Civil Service Commission, Washington, D. C., for Circular No. 72 and Application Form No. 1312.

Employment Agencies

The Employment Agencies advertising in this paper agree to refund any registration fee on demand any time within the first six months when no position is secured.

ENGINEERING MEN in every line for available positions. Applicants and employers write, The Toledo Engineering Agency, Toledo, Ohio.

WANTED

Agents and Salesmen

WANTED; SELLING HOUSE—A profitable opportunity is open for first class selling houses in New York and Chicago having live organizations, to secure very remunerative contracts for the Middle and Western States. Exclusive selling rights will be given for handling high grade machinery with an assured market. No letters answered from those without rating unless substantiated by references showing necessary ability to secure large contracts with steam power users. W. 688, Eng. News.

MISCELLANEOUS

STUDENTS wanted in all schools and colleges to sell the "Gilson Slide Rule." Liberal proposition. Slide Rule and instructions, 50c. Clair Gilson, Niles, Mich.

CHARTS FOR REINFORCED-CONCRETE BEAM DESIGN according to report of Joint Committee (Nov. 20, 1912). Rational and economical. Price, 40 cents. C. Siquot, 6 East German St., Baltimore, Md.

BUSINESS OPPORTUNITIES

WANTED—To sublet about 500,000 cu.yd. dragline excavation to reliable party who is in position to do work at once. B. O. 656, Eng. News, Chicago.

STRUCTURAL STEEL ENGINEER will connect with practicing engineer or architect on partnership basis. B. O. 703, Eng. News.

ENGINEER, ten years' general construction experience, wants partner with capital for building concrete and brick roads in Ohio. B. O. 682, Eng. News.

A VERY PROFITABLE INVESTMENT can be made in a recently established company having a cash surplus, engaged in manufacturing mechanical apparatus amply protected by patents. Orders show exceptionally large profits and with a view to extending their field of operations the company desires to add to its organization a qualified business man who can invest a substantial amount, preferably one who can act as treasurer and assist in the office management; but a responsible position can be offered a young man having an engineering training with the necessary capital to make a good connection. Proposition is closely held and will deal only with principals desiring a live interest and square treatment. Please indicate qualifications in first letter. B. O. 687, Eng. News.

Classified List

Second Hand Machinery, Material and Equipment

For Sale—Exchange—Rent—Wanted

Items not otherwise marked list equipment for sale.

Rates: Less than 4 insertions 55 cents per line—4 to 11 insertions 50 cents per line—12 or more insertions 45 cents per line.

N

ADDRESSES

BECKWITH, J. S., 108 Park Way, N. S., Pittsburgh, Pa.
BRADEN, James C., 26 Cortlandt St., N. Y. City.
CONTRACTORS' Service Co., 50 Church St., N. Y. City.
DALLETT & CO., Harrison Bldg., Phila., Pa.
DOUGLAS, Geo. B., 29 Broadway, New York.
GIVIN Co., Herbert, 30 Church St., N. Y. City.
GRIMSHAW CO., Wm. B., Drexel Bldg., Phila., Pa.
HITNER'S Sons Co., Henry A., Philadelphia, Pa.
HOISTING Engine Sales Co., 120 West 32d St., New York.
HYATT, C. W., 93 E. Oneida St., Baldwinsville, N. Y.
INGERSOLL, H. G., 76 William St., New York, N. Y.—Much of this equipment can be seen at work, vicinity N. Y.
LINES FLYNN Co., Inc., 30 Church St., N. Y. City.
MARINE Metal and Supply Co., 167 South St., N. Y. City.
MARYLAND Equipment & Supply Co., Baltimore, Md.
NEW RIVER Co., The, Macdonald, W. Va.
PIPE & Contractors Supply Co., 3 Dover St., N. Y. City.
SAMPSON Co., Geo. H., 13 Pearl St., Boston, Mass., and 42 B'way, N. Y. C.; or Winston & Co., Brown Station, N. Y.
SHERWOOD, E. C., 50 Church St., New York, N. Y.
SOUTHERN Iron & Equipment Co., Atlanta, Ga.
STALLEY, G. T., Box 390, Cleveland, Oh.o.
WHITNEY, O. R., 39 Cortlandt St., N. Y. C. (Cort. 6095).

AIR COMPRESSORS

2—Ingersoll-Rand, Cross Compound steam and air cylinders with Corliss valve gear 2500 cu. ft. capacity.—SAMPSON.

2—Ingersoll-Rand, Cross Compound Steam and Air Cylinders with Corliss valve gear 3300 cu.ft. capacity. Boilers and Condensers with this plant. All in good condition. Bargain.—SAMPSON.

1—4700 Cu. Ft. Rand B. B. 3 Compound Steam and Compound Air Compressor with Condenser.—SAMPSON.

Several second-hand air compressors, steam and belt driven, straight line and two stage of various sizes from 70 to 1300 cu. ft. capacities. Good condition.—SAMPSON.

1—22x22-13-¼x24, Sullivan, steam driven, class WB 2, straight line, 2 stage, cap., 1160 cu. ft., 1—24x24x30, McKiernan, class A, straight line, steam driven, cap. 1414 cu. ft.; 1—24x24-¼x30, Ingersoll, class A, steam driven, straight line, cap. 1223 cu. ft., 2—16x20-¼x16, Ingersoll-Sargeant, class H-1, duplex, steam driven, cap. 1540 cu. ft.—HITNER'S.

1 Blaisdell 16x10x10, 60 H.P., 342 cu.ft. First class condition. Theo. Smith & Sons Co., Jersey City, N. J.

Steam driven, 3 Laidlaw-Dunn-Gordon duplex 2-stage and 5 Norwalk tandem 2-stage.—NEW RIVER.

1120 cu.ft. Ingersoll-Rand XB-2 like new—belt driven; 179 cu.ft. Ingersoll NF-1—10x10x10.—MARYLAND.

BOILERS

5—250 H.P. B. & W., 150 lbs. steam. Horizontal return tubular, 2—72"x20', 1—78"x20', 1—72"x18', 1—72"x15', 1—72"x14', triple riveted, butt strapped, 125 lbs. steam.—HITNER'S.

150 H.P. horizontal tubular, Union, Atlas, Erie City, Keeler and West Point. Pressure up to 125 lbs.—NEW RIVER.

40, 50, 60 and 80 H.P. loco. type on skids.—PIPE & C. S. CO.

75 H.P. loco. type 100 lb. pressure allowed.—INGERSOLL.

BUCKETS

One four leaf 1 yd. Orange peel.—PIPE & C. S. CO.

5—¾ cu. yd. standard clam shells.—STALLEY.

1—1 yd. Williams single line clam shell.—BECKWITH.

Orange peel—¾, 1, 1¼, 1½ yd. capacity; clam shell—½ to 3 yd. capacity.—GIVIN.

¾ yd. Hayward Orange Peel; ¾ yd. and ½ yd. Hayward Clam Shell.—MARYLAND.

2—½ yd. steel hoisting buckets.—HYATT.

1 "Haiss" ¾ yd. and 1 "Haiss" 1 yd. clamshell, in first-class shape; used short time. Digging teeth can be installed. —GEO. HAISS MFG. CO., 142nd St. and Rider Ave., N. Y. City.

⅞ yd. orange peel Smith.—INGERSOLL.

CABLEWAYS

400' for sewer work. Carson-Lidgerwood eng.—INGERSOLL.

Most items are signed with only part of the advertiser's name. Complete names and addresses in alphabetical order will be found under the heading "Addresses."

CARS

[36" Gauge]

40—4 yd. Western dump.—INGERSOLL.

[24" Gauge]

30 Koppel 36 cu.ft. Steel Cars.—MARYLAND.

CRUSHERS

Farrel Jaw, 15x9, with screen and engine.—MARINE.

National Jaw, 14x8, on wheels.—MARINE.

Gyratory, Nos. 8, 7½, 6, 5, 4, 3.—GIVIN.

1 No. 2 Climax on trucks with 15' elevator with 18 H.P. mounted Climax portable engine and boiler.—BECKWITH.

DERRICKS

1 Steel stiff leg, 70' boom; 1 steel guy, 70' boom, 25 tons cap.; 1 steel traveling, 45' boom.—GIVIN.

45 & 55 ft. Boom Terry & Tench Stiff Legs; 90 ft. Boom A. H. & D. Co. Guy; 45 ft. Boom All Steel Traveling Derrick—Mundy 3 drum engine and Boiler and steam swinger complete. —MARYLAND.

Trav., 25' spread, 60' boom DD Mundy hoist.—INGERSOLL.

DREDGES

Hydraulic and dipper. Sale or charter.—GIVIN.

ELECTRIC LIGHTS

For sale at less than half cost. Sixty 300 C.P. D.C. 220 V. Nernst arc lamps, moon globes. In perfect running condition. Can be seen in use in our offices; $4 each. (Regular price, $9.50). Price includes drop lighting switch. Must sell as our voltage is 110 in new office. HILL PUBLISHING CO., 10th Ave. at 36th St., New York.

ENGINES, GAS

1 8 H.P. Vertical Type Fairbanks with sub-base.—SAMPSON

1—5 H. P. Mietz & Weiss.—PIPE & C. S. CO.

FEED WATER HEATERS

Several types, capacities up to 1200 HP.—NEW RIVER.

FIRE ENGINES

2 Fire Engines, condition, first class.—HITNER'S.

HAMMERS

1 No. 6 Arnott Hammer.—HYATT.

HOISTING ENGINES

Lidgerwood 10x12 D.D.D.C. side by side drums, 33" diam.—MARINE.

Lidgerwood, 5x8 D.D.D.C. with boiler.—MARINE.

12 Lidgerwood, Lambert and others. Also one 5 lever Stroudsburg 7x10 cableway engine. PIPE & C. S. CO.

2 Lidgerwood 14x18, D.C. 3-tandem drum, reversible link motion; 1 Lidgerwood, 10x12, D.C. S.D. reversible link motion; 1 Lambert, 10x12, D.C. D.D. with boiler; 2 Lambert, 8x10, D.C. D.D. with Mass. boilers; 1 Lambert 7x10, D.C. D.D. with boiler; 1 Mundy, 7¼x10, D.C. D.D. with boiler; 1 Mundy, 6¼x10, D.C. D.D. with boiler; 1 O. & S. 6¼x8, D.C. D.D. with boiler. 2 Lidgerwood, 60 H.P. D.D. and swinger d.c. hoists.—HITNER'S.

9x10 Lidgerwood 3 drum—8¼x10 Lidgerwood D.D. with or without boiler or swinger. Other sizes.—GIVIN.

1—7½ H.P. single drum electric hoist.—BECKWITH.

SEVENTY-FIVE hoists for immediate delivery.—HOISTING.

INSTRUMENTS, SURVEYING

Second-Hand Transits, Levels, etc. Bought, sold or exchanged. Send for list of Second-Hand Instruments. Get our prices before ordering. WILLIAMS, BROWN & EARLE, Inc., Engineering Supplies, Dept. E, 918 Chestnut St., Phila.

Gurley Lt. Mt. Transit V circ. with guard; reversion tel. level; ex. diag. eye piece; stadia; Ainsworth Solar; Cost $240. Good cond., repair perfect. $175.—R. F. GRAY, Lusk, Wyo.

1 "Sterling" Architects Wye level.—HYATT.

LOCOMOTIVES

[Standard Gauge]

1 Porter, Std. G., 20-ton, 12x18, saddle tank.—DOUGLAS.

50 locomotives, Switch, Mogul, Consolidation, Ten Wheel and Saddle Tank types.—SOUTHERN.

Baldwin, 14x24, 4-driver, S. T., new this year.—DALLETT

2—40 ton switchers, overhauled.—CONTRACTORS S. CO.

11x16 Vulcan and 10x16 Porter 4 driver S. T.—MARYLAND.

[36" Gauge]

10 10x16" Porter, Davenport and Vulcans.—SOUTHERN.

5 9x14" Porters.—SOUTHERN.

9x14 Porter and 10x16 Baldwin.—BRADEN.

2—9x14 Baldwin saddle tank.—BECKWITH.

5—10x16 Vulcans, 1911-12.—CONTRACTORS S. CO.

9x14—10x16 cyl. Porter-Vulcan contractors' type.—MARYLAND.

1—Baldwin 10x16" 16 ton dinkey, sale or rent.—SHERWOOD.

1—18 ton Porter; 1—18 ton American.—INGERSOLL.

[24" Gauge]

6x10 Porter, 6x10 Baldwin, 7x12 Vulcan, 7x12 Baldwin, all 4 driver saddle tank.—MARYLAND.

LOCOMOTIVE CRANES

4 and 8-wheel, 10, 15 and 20 tons capacity.—HOISTING MACHINERY Co., 48 Church St., New York City.

4 and 8 wheel 10 and 15 ton.—CONTRACTORS S. CO.

15-ton Browning, 4-wheel, S. G., 50' boom.—DALLETT.

1—7 Ton, 4 wheel, Industrial, 21' boom; 1—15 ton, 8-wheel, Industrial, wrecking crane, 20' boom, goose neck.—HITNER'S.

15 ton excellent condition, cheap.—STALLEY.

4 and 8 wheel, 10, 15, 20 and 25 tons capacity.—GIVIN.

Browning 15 ton No. 8—8 wheel type—45' boom; Browning 10 ton No. 1—4 wheel type—40' boom.—MARYLAND.

MIXERS (Asphalt and Concrete)

Hadsel 2 yd. Batch, with engine,—on channels.—MARINE.

Smith ¾ yd. Batch with engine,—on skids—MARINE.

Foote (cont.) No. 3, 7½ H.P. motor D.C. on wheels.—MARINE.

Portable plant, complete capacity 300-600 yds. per day; rare bargain.—LINES FLYNN.

1 Continuous Foote with 10 H.P. d.c. motor direct connected; 3—¾ yd. and 2—½ yd. Ransomes with engines—on skids. Two No. 2½ Smiths with engines—on wheels.—PIPE & C. S. CO.

Haines gravity, ½ yd.—INGERSOLL.

MOTORS, ELECTRIC

1—30 H.P. General Electric 220 v. direct current.—SHERWOOD.

PILING, SHEET STEEL

5000 pieces Lackawanna and Carnegie.—GRIMSHAW.

[Wanted]

50 lin.ft. good Lackawanna, in pieces, about 25' long.—CHATFIELD & CHATFIELD, Inc., 94 Benedict St., Waterbury, Conn.

PIPE

All sizes. ½" to 18" with perfect threads and couplings, also larger sizes. Pipe cut to sketch. PIPE & C. S. CO.

PIPE MACHINES

Saunders, Williams, Stover; from ⅝ to 8".—PIPE & C. S. CO.

Most items are signed with only part of the advertiser's name. Complete names and addresses in alphabetical order will be found under the heading "Addresses."

PUMPS

1 Cameron 3½x2x4 Steam pump.—SAMPSON.

1 No. 8, 1 No. 9, 1 No. 10 Cameron.—MARINE.

2 Davidson Simplex 9x9x11.—MARINE.

1 Worthington Duplex 6x4x6.—MARINE.

1 Worthington Duplex 10x6x10.—MARINE.

2 Snyder-Hughes Vacuum 10x14x12 Simplex.—MARINE.

1 No. 486 Emerson, 4" suc., 3" dis.—MARINE.

Piston and plunger, sizes up to 12x12x12.—NEW RIVER.

2 Worthington 1,500,000 gal. Horizontal, Duplex Power, 14" diameter, 10" stroke.—WATER & LIGHT COMMISSION, Fergus Falls, Minn.

1 Compound duplex vertical center packed plunger, circulating pump, size 21—34x19—24, capacity 3500 gallons, 24 hours.—HITNER'S.

RAILS

24" and 20" industrial rail and turntables.—PIPE & C. S. CO.

30, 40, 45, 56, 60 and 70 lb. Relaying Rail.—MARYLAND.

16 and 20 lb.—24" Gauge Portable Track.—MARYLAND.

100 tons 40 to 50 lb. rails, ties, etc.—INGERSOLL.

ROAD ROLLERS

10-ton macadam roller, at a bargain; condition fine.—F. S. 666, Eng. News.

[Wanted]

Tandem paving roller. Send description and price to W. 667, Eng. News.

SEWER PLANTS

2—Complete Sewer Contractor's Plants, including compressors and locks.—LINES FLYNN.

SPRINKLER

500 gal. sanitary auto. street flushing mach.—INGERSOLL.

STEAM SHOVELS

Marion, model 60, steam shovel.—SOUTHERN.

1 ¾-yd. revolving traction, rebuilt.—LINES FLYNN.

1 70-ton Bucyrus, 2½ yd. dipper; Thew "O."—BRADEN.

2—65 ton, Bucyrus, 2½ Yd. dippers, $3000 each.—HITNER'S.

50 steam shovels, all makes and sizes; some used only two months; rent or sale. Rare bargains. Everything sold is guaranteed.—CONTRACTORS S. CO.

Thew "0" traction, modern, high number.—DALLETT.

1 Model 0 Thew, built 1912, low price.—GIVIN.

1—Bucyrus, 18 B, traction revolving ⅞ yd.—GIVIN.

No. 0 Thew traction, ⅝ yd. dipper, 15 tons, heavy boom type. First class condition. Will make price low for quick cash sale. —L. F. SEYFERT'S SONS, INC., 437 North Third St., Phila., Pa.

1—Model D 1909 Vulcan, in good repair; will do excellent work on dirt; shop No. 1427.—TOLEDO STONE & GLASS SAND CO., 221 Ohio Bldg., Toledo, Ohio.

Bucyrus 14-B—¾ yd. Traction 1914; Marion-Osgood MO-18—¾ yd. Traction 1914; Marion Model 31 Traction—1914; Thew Model A-No. 1 Traction shop No. 739; Thew Model No. 0 Traction shop No. 470—cheap.—MARYLAND.

2—70 ton Bucyrus 2½ yd. dippers.—INGERSOLL.

TRAVELING CRANES

1 15-ton electric 36' 6" span.—DOUGLAS.

One—with clam shell bucket, new and cheap.—WHITNEY.

TURBINES

2 Houston 44" Vertical, with beveled gears, shafting, etc. —WATER & LIGHT COMMISSION, Fergus Falls, Minn.

FOR SALE

Air Reheaters	Tripods	Pumps
Blowers and Fans	Drill Columns	Saw
Buckets	Electric Locomotives	Steel Pontoon
Cars	Grout Machines	Spiral Pipe
Car Tipple	Man Locks	Wrought Iron Pipe
Rock Drills	Pile Hammer	Drill Steels
Elevators		

Apply to

Harold Carpenter, Resident Engineer, Astoria Light, Heat & Power Co., East 132nd St. and Locust Ave., New York City.

Firm building good engineering specialties and desiring to acquire

Export or Eastern Business

can make advantageous New York connection with party having technical ability, selling experience, and a complete office equipment.

Address W. 621, Engineering News.

DEAN STEAM PUMP

8—16—10—18 Complex Condensing Duplex Pumping Engine.

5½—8—7 Condenser. 3—2—3 Duplex Boiler Feed Pump.

48" Horizontal Return Tubular Boiler.

For sale, in good condition.

Apply Superintendent, Mt. Auburn Cemetery, Cambridge, Mass.

FOR SALE Nine scows, various dimensions, derricks, pile driver leads, 600 tons Carnegie steel sheeting, wood piling, heavy bridge and dock timber, engines and boilers, miscellaneous contractors' equipment, ten steel bridges, 2-52', 2-48', 2-45', 2-37', 2-31'.

Address, EDWARD GRAY

Foot of Orleans St., Detroit, Mich.

At Auction Sale

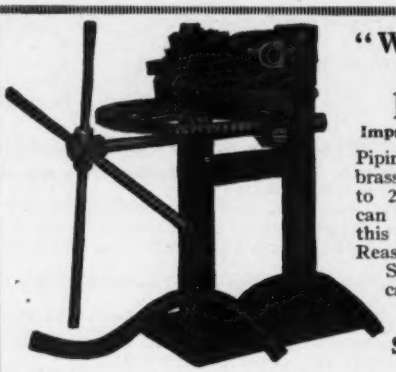
Bridge and Structural Plant of the Lane Bridge Company, Painted Post, Steuben County, N. Y., sold to the highest bidder by order of Bankruptcy Court, on

JANUARY 23, 1915

Main building 80'x160', nearly new. Erie, D. L. & W. and New York Central Railroads. Entire holdings, including plant, machinery, erection tools, stock of structural steel and supplies.

For further information, address the Trustees,

A. F. Williams, G. D. Case } Painted Post, N. Y.



"WALLACE" Pipe Bender

Improved Style No. 5-A

Piping of steel, iron, brass, copper, etc., up to 2 inches diameter can be bent cold by this efficient machine. Reasonable in price. Send for our 16-page catalogue.

WALLACE SUPPLY CO., MFRS.

418 Orleans St., Chicago 2316 Woolworth Bldg., New York City

CONTRACTING ENGINEERS

STEEL AND MASONRY CONSTRUCTION
PIERS AND SHEDS COALING PLANTS

Cable Address, Santee New York. Western Union & Lieber Codes Used.
Cable Address, Pawnee Havana. Havana Office, Zulueta 36 D.

THE SNARE AND TRIEST COMPANY

Woolworth Building, 233 Broadway New York

WHAT ARE YOU BUILDING?

Don't guess. Let us get you a large, clean core of the foundation of your bridge or dam site. Examine it in daylight.

THE J. A. BRENNAN DRILLING CO.

Pittsburgh, Pa

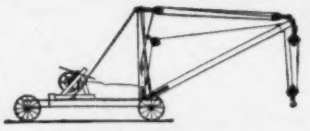
Contractors for Diamond Drilling. We make a specialty of prospecting bituminous coal.

WESTERN

Earth and Stone Handling Machinery

Air Dump Cars—Hand Dump Cars—Spreader Cars—Scrapers—Road Machinery—Portable Rock Crushers—Dump Wagons—Elevating Graders. Wagon Loaders and Ditchers. **Glad to send Catalogs.**

Western Wheeled Scraper Co., Farnsworth Ave. Aurora, Ill.



Derricks—Cableways

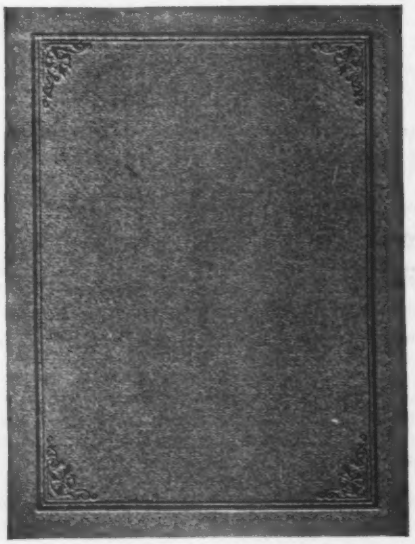
John T. Horton

Specialist in Hoisting Equipment

A Labor Saver

90 West St., New York

"BUY THE BINDER"



Bye and bye you'll buy the binder. Why not now?

THIS is the BEST way to keep your copies of Engineering News.

¶ Unless you **throw away** each issue it will **pay** you to buy the binder. Because when you want to know what that article said, what those figures were or what transpired then, you'll have the information in

Neat—Compact—Findable

form. You wouldn't say that it wouldn't be worth 50 cents to you, would you? That is the price, prepaid to your door. Will you send us your order now?

¶ A handsome, heavy board and cloth binder, heavily grained. Holds 6 months' issues. Easily manipulated and with the index, furnishes a bound volume ready for instant reference. Index furnished every 6 months **Free.**

ENGINEERING NEWS, 10th AVE. at 36th ST., NEW YORK